

Annual Carbon Emissions 2015/16
From East Devon District Council controlled sources

EXECUTIVE SUMMARY

EDDC is reporting its carbon emissions from its own estate and operations for the third time, using data from the 2015-16 financial year, and DEFRA's 'reporting year 2015.

The four areas of activity included in our 2015/16 GHG emission report are:

- Use of buildings
- Fleet vehicle use
- Business travel (private vehicles)
- Water use and treatment (included for the second time)

The emissions, measured in tonnes of CO₂ equivalent (CO₂e) for these areas of activity for the reporting year (2015), the previous year (2014) and the base line year (2013), were:

Activity	2015	2014	2013
Use of buildings and operations (electricity supply)	793	769	784
Use of buildings (transmission & distribution of electricity)	66	67	67
Use of buildings (natural gas)	350	353	368
Use of buildings (LPG)	3	2	-
Fleet vehicle use of diesel & petrol	388	402	420
Business travel (car use only) use of diesel & petrol	110	121	135
Water supply	11	13	-
Water treatment	24	27	-
Total	1745	1754	1774

The total emissions this year have reduced by 0.51%, remaining substantially unchanged from Reporting Year 2014's total of 1754 tonnes CO₂e; this is despite an increase in reported electricity use of 9.6%, including unmetered electricity for the first time. Reductions in the use of vehicles and in emission factors for electricity have contributed most to the small overall reduction in emissions.

REPORT

Emission releasing activities are classified by operational 'scope', as defined in DEFRA's Reporting Guidelines, page 35, the relevant excerpt from this document is:

"A widely-accepted approach is to identify and categorise emissions-releasing activities into three groups known as scopes. These are defined in the GHG Protocol Corporate Standard and are described below with their equivalent term from ISO 14064-1 in brackets:

Scope 1 (Direct emissions): *Emissions from activities owned or controlled by your organisation that release emissions into the atmosphere. They are direct emissions. Examples of scope 1 emissions include emissions from combustion in owned or controlled boilers, furnaces, vehicles; emissions from chemical production in owned or controlled process equipment.*

Scope 2 (Energy indirect): *Emissions released into the atmosphere associated with your consumption of purchased electricity, heat, steam and cooling. These are indirect emissions that are a consequence of your organisation's activities but which occur at sources you do not own or control.*

Scope 3 (Other indirect): *Emissions that are a consequence of your actions, which occur at sources which you do not own or control and which are not classed as scope 2 emissions. Examples of scope 3 emissions are business travel by means not owned or controlled by your organisation, waste disposal which is not owned or controlled, or purchased materials or fuels."*

In this report DEFRA's 'Standard Set' of factors is used to convert the energy consumed into the resulting emissions and calculate the kilograms and tonnes of CO₂e for each activity.

RESULTS

EDDC has measured certain scope 1, 2 and 3 emissions for its areas of activity. The emissions for the four areas of activity for the financial year 2015-2016 and their scope type are given in Table 1 as follows;

Table 1: Greenhouse Gas Emissions for EDDC 2015-2016

Emissions Source	Tonnes CO ₂ e
Scope 1	
Use of buildings (natural gas)	350
Use of buildings (propane LPG)	3
Fleet vehicles	388
Scope 2	
Use of buildings (electricity)	793
Scope 3	
Use of buildings (transmission & distribution of electricity)	66
Business travel (private vehicles)	110
Water supply	11
Water treatment	24
Out of scope	
Fleet vehicle use (biogenic fuel element), out of scope	13
Totals	
Scope 1 and 2	1,534
Scope 3	211
Gross emissions total	<u>1,745</u>
Out of scope	13

Notes:

The above does not include emissions from EDDC buildings occupied by LED Leisure Ltd, nor does it include emissions from the council's waste and recycling operations outsourced to SITA (Suez) Ltd, nor emissions from the council's housing maintenance partnering contracts with Skinner Construction Ltd and MD Building Services Ltd.

Comparison with the 2013/14 base line year

In comparison to the base year, 2013, the total emissions for 2015 have decreased by 29 tonnes CO₂e or 1.63%.

Comparison with the previous 2014/15 year

A comparison is made below of Council activities by scope between Reporting years 2014/15 and 2015/16.

- Use of buildings (natural gas), scope 1:
Emissions have reduced by 3 tonnes CO₂e (0.85%) over the 2015 Reporting year, from 353 to 350 tonnes CO₂e. Natural gas is used for heating buildings and a reduction in consumption has occurred despite the colder heating season of 2015-16 compared to 2014-15. By a measure of degree days (15.5°C base6) the 2015 reporting year heating season was 7% colder than 2014..
- Use of buildings (propane LPG), scope 1:
This activity is reported this year for the second time. This shows an increase of 67% in the use of LPG at this small, single site where an unexplained increase in use of showers and heating may account for the rise in consumption, with associated emissions rising from 1.8 to 3.1 tonnes CO₂e. The apparent discrepancy could also be due to inaccurate estimates of gas in stock at the beginning and end of the reporting period. Data for this site could be made more robust by the installation of a gas meter.
- Fleet vehicle use, scope 1:
A reduction in emissions of 14 tonnes CO₂e (3.48%) has been made during this reporting year for this activity, from 402 to 388 tonnes CO₂e. This is largely attributable to a comparable reduction in fuel used.
- Fleet vehicle use (biogenic fuel element), out of scope:
This measure has increased by approximately 3 tonnes CO₂e (30%) over reporting year 2014, from 10 to 13 tonnes CO₂e. This is largely explained by a 37.83% increase in the DEFRA factor for diesel for this measure. Diesel fuel represents 94% of the fleet's total consumption.
- Use of buildings (electricity), scope 2:
Emissions from electricity supply reported by the Council have increased by 24 tonnes CO₂e (3.12%), from 769 to 793 tonnes in 2015 compared to 2014. EDDC has included in this report for the first time 17 unmetered electricity supplies, and their emission data has been aggregated with the metered supplies emission data under this measure's Scope 2. Whilst the volume of electricity reported has increased by 9.57% a reduction in the DEFRA factor for CO₂e emissions of 6.49% for electricity supply has helped to reduce the overall increase in 2015's emissions for this activity.
- Use of buildings (transmission & distribution of electricity), scope 3:
The increase in electricity use in 2015 and its associated CO₂e emissions have been offset by a reduction in the DEFRA factor for this measure of 11.7%, lowering this year's emissions to a tonne below last year's total.

- Business travel (car use only), scope 3:
Emissions from the use of private cars on Council business was reduced by 11 tonnes CO₂e (9.09%), from 121 to 110 tonnes CO₂e. This is in line with a 3.63% reduction in claimed mileage from 416,822 miles in 2014 to 401,691 miles in 2015 and the gradual replacement by their owners of older, less efficient vehicles..